

Sea World Enterprises, Inc.

1720 SOUTH SHORES ROAD, SAN DIEGO, CA 92109-9980

LANNY H. CORNELL, D.V.M. Senior Vice President Zoological Director (619) 226-3829

May 7, 1987

Robert Brumsted
National Marine Fisheries Service
U. S. Department of Commerce
Washington, D.C. 20235

Dear Mr. Brumsted:

On March 9th of this year, under the terms and conditions of Permit No. 504, Sea World imported six Pacific black whales (Pseudorca crassidens). As you know, the selection of marine animals from the wild is not always an exact science. Occasionally an animal is acquired and, while it appears to be in good health, can be fraught with internal disease and/or parasites which lead to its death.

Such was the case with one of the black whales. A female, 329 cm long, died in transit to San Diego aboard a charter 707 jet freighter. The animal showed no warning signs prior to death. Necropsy showed severe parasitism and pulmonary edema, which was the likely result of the parasite load and compromised the lungs and liver.

The other five whales, although having their share of parasites as well, are progressing nicely at our San Diego park.

This letter is to request we be allowed to replace this single animal which died. As you know, this is an infrequent request from Sea World, and we would appreciate your approval. Copies of the necropsy report and laboratory results are enclosed.

Lanny H. Cornell, D.V.M.

LHC/ldf

MAY - 8 1987

SEA WORLD, SAN DIEGO

NECROPSY REPORT

| GENUS/SPECIES: Psuedorca crassidens I.D. NO. SWC-Pc-8731 |
|---|
| DATE/TIME OF DEATH: 4-12-87/1900 PATH. NO. SW 87087 |
| DATE/TIME OF NECROPSY: 4-13-87/0900 SEX: female |
| CLINICAL HISTORY PRIOR TO DEATH: Animal died during transport to the United States. |
| |
| APPEARANCE: The animal is an adult female in good flesh. |
| AFFLARANCE: The antimat is an addit remate in good fresh. |
| WEIGHT: 329 cm GIRTH: |
| GROSS NECROPSY FINDINGS: |
| INTEGUMENT: A 3 cm in length abrasion is present on the ventral surface of the left fluke. |
| MUSCULOSKELETAL: unremarkable |
| RESPIRATORY: The lungs are inflated and purple-red in coloration. On cut- surface the lungs are rubbery and all airways ooze whitish foam. The tracheal mucosa is congested and the lumen contains some whitish foam. |

CARDIOVASCULAR: unremarkable

I.D. NO: SWC-Pc-8731

PATH. NO.: SW 87087

GROSS FINDINGS (continued):

DIGESTIVE:

LIVER: The liver is normal in size and coloration. On cut surface some blood oozes from vasculature, and numerous threadlike flukes approximately 4 cm in length are present within the bile ducts. Two thin scars, 6 cm in length, are present within the parenchyma.

STOMACH: Considerable kelp is present within the forestomach and glandular stomach. The mucosa is grossly normal, and no parasites are grossly apparent.

PANCREAS: The pancreas is slightly congested, but otherwise unremarkable.

INTESTINE: Several tapeworms are present within the anterior colon. The intestine is otherwise unremarkable.

UROGENITAL: The bladder lumen is slightly congested.

KIDNEY: unremarkable

ENDOCRINE:

ADRENAL: unremarkable

THYROID: unremarkable

REPRODUCTIVE: The ovaries appear bilaterally quiescent. The uterus is unremarkable and the cervix is closed.

LYMPHATICS: The sublumbar lymph nodes are slightly congested.

SPLEEN: unremarkable

NERVOUS SYSTEM: unremarkable

| I.D. | NO:_ | SWC-Pc-8731 | | | |
|------|-------|-------------|-------|--|--|
| PATH | .NO.: | SW | 87087 | | |

ADDITIONAL COMMENTS:

HISTOPATHOLOGY:

<u>PARASITES</u>: numerous flukes in bile ducts; numerous tapeworms in intestine <u>CULTURES</u>:

DIAGNOSIS:

PRIMARY: severe acute pulmonary edema SECONDARY: parasitism

| CURATOR: | | | | |
|---------------|-----|----------|-----|--|
| VETERINARIAN: | Bun | Extract. | DVm | |
| | | 1 | | |
| TECHNICIAN: | | | | |

HISTOPATHOLOGY

| Animal | I.I | | SWC-Pc-8731 | | |
|---------|-----|-----|-------------|-------|--|
| Patholo | ogy | No. | SW | 87087 | |

Lung: The only change seen in the lung was edema of alveoli and bronchi and to a lesser extent in some interstitial tissue.

<u>Heart:</u> The myocardial fibers are pale. It is difficult to determine if this change is postmortem autolysis or hydrophic degeneration.

<u>Liver:</u> A moderate congestion of the sinusoids and central veins was evident, especially near the main bile duct. The bile duct papillae and adjacent duodenum contain parasites that have some characteristics of trematodes.

Spleen: unremarkable

Lymph nodes: The lymph nodes were moderately edematous.

All other tissues were essentially normal.

DIAGNOSIS: 1. pulmonary edema

parasitism - trematode

May 4, 1987